Round I e-Prescribing Partnerships in Kentucky Grants Final Report 2007

Overview

In 2006 the Kentucky Cabinet for Health and Family Services (CHFS) and the Kentucky e-Health Network Board (KEHN) undertook the first round of the e-Prescribing Partnerships in Kentucky (ePPIK) Grant Program. Electronic prescribing or e-prescribing can be defined as interactive electronic communications between medical practices and pharmacies focused on the submission of prescriptions, refill authorizations, and other patient-based information related to pharmaceuticals. It is recognized as a clinically-oriented example of Health Information Technology (HIT) that can improve care quality, safety and efficiency and have immediate benefits for patients, providers, pharmacies, and health plans.

Funding of $300,000 for the first round of ePPIK Grant Program was provided by the Foundation for a Healthy Kentucky and the Hal Rogers Grant that supports the Kentucky All Schedule Prescription Electronic Reporting (KASPER) Program. The Foundation for a Healthy Kentucky is a non-profit organization that seeks to address the unmet health care needs of Kentucky.

CHFS offered the grant program in partnership with the Governor's Office of Local Development (GOLD). GOLD served as the fiscal and administrative agent of CHFS for the ePPIK Grant Program.

The goals of the first round of the ePPIK Grant Program were to:

1. Encourage Health Information Technology (HIT) adoption in Kentucky by making HIT adoption more affordable;
2. Develop relationships and work patterns that support electronic information sharing among health care entities such as physician offices and local pharmacies; and
3. Assess how e-prescribing will enhance and impact the KASPER program.

Project Achievements

The following table summarizes the ePPIK Round I grantees and the scope of each project. The counties impacted are shown in Figure 1 below.

Color Code to County Impacted	Grantee	Scope Summary	Grant Applicant
	Baker Family Care	• Implement an Electronic Medical Record (EMR) system that includes e-prescribing	Dr. Brenda Baker, M.D. P. O. Box 517 Neon, Kentucky 41840-0517
	Kentucky Primary Care Association, Inc.	• Implement e-prescribing at 5 clinics	Mr. Joseph Smith, Executive Director P. O. Box 751 Frankfort, Kentucky 40601
	University of Kentucky North Fork Valley Community Health Center	• Implement an EMR system that includes e-prescribing.	Michael Stanley, CEO 750 Morton Blvd. Hazard, Kentucky 41701
	St. Clair Medical Center	• Implement e-prescribing at 5 primary care clinics associated with St. Claire Regional Hospital.	Mark Neff, CEO 222 Medical Circle Morehead, Kentucky 40351
	Clinton County Hospital, Inc.	• Implement an EMR system with e-prescribing in four physician offices, allowing these offices to join the Clinton County e-Health Partnership.	Dr. Randel A. Flowers, PhD 723 Burkesville Road Albany, Kentucky 42602

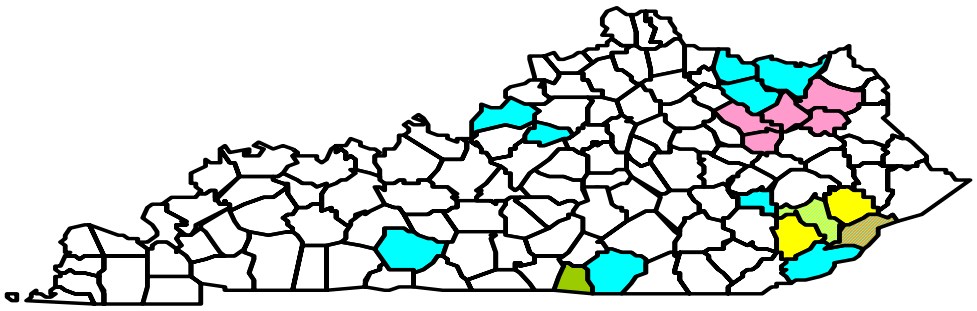

Figure 1 Counties Impacted by ePPIK Grants Round I

Each of the grantees used an electronic prescription clearing house including SureScripts or RxHub to process prescriptions. Each of the grantees established some partnerships with local pharmacies which were owned by either small, local businesses or by national pharmacy chains.

Round 1 ePPIK Grants helped the grantees implement e-prescribing across widely distributed areas of Kentucky. E-Prescribing is an important component of Health Information Technology (HIT). Some of the grantees implemented e-prescribing as a first step toward eventual use of an Electronic Medical Records (EMR) system while some of the grantees implemented e-prescribing as part of a complete EMR system. At the time of the grant final reports, all grantees were successfully using an e-prescribing system.

Information obtained through round I of ePPIK grants will be used by Cabinet for Health & Family Services KASPER staff to assess how e-prescribing will enhance and impact the KASPER program. Recommendations resulting from round I of ePPIK Grants will be reviewed by the KASPER development team and by KASPER focus groups to help identify and prioritize KASPER enhancements. The KASPER staff is currently working on several of the recommendations provided. The University of Kentucky North Fork Valley Community Health Center worked with their EMR vendor to provide a link from the EMR software to the KASPER log-in screen, this resulted in some recommendations on workflow around integrating KASPER with an EMR.

An additional outcome of round I of ePPIK grants was the *e-Prescribing Grantees Roundtable: Successes and Lessons Learned* session at the Kentucky e-Health Summit held December 7, 2007. This session was moderated by Susan G. Zepeda, Executive Director, Foundation for a Healthy Kentucky and featured the following ePPIK grantees:

- Lynn Grigsby, CIO, UK Healthcare North Fork Valley;

- Andrea Adams, Deputy Director, Kentucky Primary Care Association ;
- David Bolt Chief Operating Officer and Director of Planning and Business Development , PrimaryPlus; and
- Dr. Will Melahn, Site Director, UK Family and Community Medicine Rural Training Track, St. Claire Regional Medical Center.

At this session, the grantees shared their experiences implementing and using e-prescribing including a discussion on patient care, workflow and financial impact.

Lessons Learned

Barriers encountered and lessons learned during round I of ePPIK grants fall into one of three general categories (workflow, partnership and KASPER specific) with a few miscellaneous items. The barriers and lessons learned are summarized by category below.

Workflow

Several significant workflow barriers were surmounted by the grantees:

- The electronic prescription clearinghouses require a unique identification number for each prescriber. Several grantees reported that their clearing house vendor used the prescribers DEA number as that unique identifier. Many Advanced Registered Nurse Practitioners (ARNPs) prescribe non-schedule drugs but do not have DEA numbers. The grantees recommended two courses of action. The first is to start working early with ARNPs to obtain DEA numbers. The second was to find an alternate unique identifier to identify an ARNP. One of the grantees used a combined number made up of the supervising physician's DEA numbers and the last 4 digits of the ARNP license number to identify an ARNP to the electronic prescription clearinghouse.

- It takes considerable time to thoroughly train users on the e-prescribing and EMR systems. In addition, it takes time for people to become proficient at using these systems. Several of the grantees recognized the need to increase training time. Several also suggested that any organization implementing an EMR should plan for a loss of productivity for the first 30 days as staff adjusts to using the new system. Lowered productivity can be mitigated through increased staffing or a reduced patient schedule. The grantees noted that the organization needs to budget for this reduced productivity when planning the implementation.

- At this time, the Drug Enforcement Administration regulations do not allow a Schedule II drug to be dispensed based on an electronic signature. Most of the grantees adopted an approach suggested by the CHFS KASPER team. The prescription was written using the e-prescribing system and transmitted to the pharmacy; the ordering provider then printed the legal controlled substance prescription form, signed it and gave it to the patient. The patient then takes the signed paper prescription to the pharmacy where the drug is dispensed. During the Summit e-Prescribing Roundtable, the grantees were unanimous in saying that they wanted to be able to e-prescribe schedule drugs and that they felt this

would be more secure than the current paper system. They expressed the belief that the safeguards built into e-prescribing would make prescription falsification less likely than it is when paper prescriptions are used. The Drug Enforcement Administration is considering regulatory changes that would allow e-Prescribing including Schedule II drugs, but no timetable has yet been published.

Partnership

Two partnership challenges were identified:

- Several of the grantees noted that some pharmacies in their local area did not use a computer system for prescriptions and could not receive an electronic prescription. These were typically small, locally-owned pharmacies. An electronic prescription could be automatically faxed to a non-computerized pharmacy or the prescription could be printed in the provider's office and then carried by the patient to the non-computerized pharmacy. The grantees noted that these small, local pharmacies would typically say that they could not afford to computerize. Will these local businesses be able to sustain themselves as electronic prescribing becomes widespread? Efforts to help local, small pharmacies computerize may be needed to maintain the viability of these small businesses.

- Another partnership challenge one of the grantees faced involved where the benefits from the e-prescribing effort would accrue. This was a partnership between a hospital and four physician offices. The hospital was the grant applicant for e-prescribing implementation at four local physician offices. The hospital administrator noted in the final report that he believed that the physicians benefited from using the e-prescribing system but the hospital gained no benefit. The question of who actually realizes benefits from an e-health implementation across organizations and entities often arises. This highlights the need to be sure the role of each stakeholder in the implementation and the benefits to be received from the system usage are clearly defined during the planning phase of the project.

KASPER

The grantees noted some specific challenges around using KASPER electronically:

- CHFS security policy has been that a provider needs to supply their social security number to obtain a KASPER user ID, in order to verify the provider's identity. Some providers expressed a concern about disclosing their SSN. The CHFS KASPER staff assured the providers that the SSN is used only to validate the provider's identity at the beginning of the KASPER user account establishment process and is kept secure, similar to the process of supplying a SSN when opening a new bank account. The CHFS Office of Information Technology security officer recently determined that an acceptable alternative would be for KASPER account applicants to provide the last four digits of their social security number, and changes to KASPER are planned to implement the new requirement for last four digits only.

- Currently, the KASPER data is updated by a batch process that takes place approximately 16-20 days after the prescription is dispensed. All the grantees indicated that they believed that KASPER would be more effective if the update took place when the prescription is filled, that is a real-time update. CHFS KASPER staff is currently working on a project to reduce the time delay for most prescription data to one day after the prescription is dispensed.

- Since the KASPER data is sensitive, with restricted access based upon Kentucky Revised Statute 218A.202, grantees needed to develop security policies for KASPER data usage, disclosure and storage. Policies included viewing the data only (not printing it), shredding the reports if they were printed, or storing the reports in a secure manner separate from the patient's medical chart to avoid accidental disclosure. Grantees also developed policies indicating who is allowed to review the reports and what type of action can be taken based on the reports.

Miscellaneous

Two other challenges encountered by the grantees were:

- Some of the grantees expressed concern that the chain of legal responsibility for electronic prescribing was not clearly defined. A few were questioned about this when they approached local pharmacies about e-prescribing. For example, who is responsible for an electronic prescription that does not reach the correct destination or what is the plan to continue business if the systems are down? These questions should be answered as the legal status of e-prescribing evolves.

- A few of the grantees found management of their selected vendor to be a challenge. System vendors may be short on resources and sometimes it is a challenge for a smaller customer to obtain service. When small businesses select a system, they need to consider what service they can expect from the vendor long term as well as considering the initial purchase price. Vendor references need to be checked and the references should be businesses of a similar size and nature.

<u>Going Forward</u>

This successful ePPIK Grant Round I Program has helped establish e-prescribing partnerships in communities across Kentucky. It has made EMR implementation possible in patient care delivery settings that, without the grant funding, might not have been able to afford an EMR. In addition, learning has been generated and captured to assist others in implementing e-prescribing. Information generated will be utilized by CHFS to evaluate and plan for the impact of e-prescribing on KASPER.

Considering the success of the ePPIK Round I Grants, the Cabinet for Health & Family Services has provided funds for ePPIK Round II Grants. Round II will distribute $335,000 in grants using the same general guidelines. The Round II Grantees will benefit from the lessons learned during ePPIK Round I.